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Control of Small Parts Stamping in The Electronics Industry

From the title of the article, one might well wonder why we have seen fit to publish it in a magazine devoted primarily to the various aspects of budgeting. We do so simply because we feel that the author makes a strong case for adequate control of costs – and no true budget man can not but say "AMEN" to attempts to control costs. The reports the author advocates for the purpose of providing informative data on production costs are not necessarily unique, but they do apply specifically to the problem of controlling costs on large quantity production runs. In this repect they may not have universal appeal to our membership, but who is to say what tomorrow will bring. We believe that this article contains a valuable storehouse of practical ideas for all of us involved in the budget processes.

**The author has recently changed his Company affiliation to Raytheon Manufacturing Company.*

One of the aims of cost control is to localize excess costs so that management may take appropriate action. The five-point system of control by group standards, described herein, takes cognizance of the fact that attainment of standard production speeds in a machine-spaced operation insures effectiveness of control over the various elements of cost entering into the product.

Beginning with this overall approach and then localizing excess costs of material by type of material consumed, labor by nature of operation performed, and die maintenance by individual die, it can reasonably be expected that unfavorable variances will run the gamut of control and that excesses will quickly be pinpointed for action.

The controls relate to variable costs of production – – those which take the largest bite out of the sales dollar. Every dollar of these costs which is pared down means another dollar left to cover fixed costs and profit.

Before describing this method of control through use of group standards it might be well to first explain the uses of these small electronic parts and then to briefly describe the stamping operation.

HOW SMALL PARTS ARE USED

Metal parts used for electronic components are generally punched out of brass, steel, copper, phosphor bronze, and nickel – – depending upon the function to be performed. The parts may be in the nature of electrical contacts, saddles, and shields for tube sockets; anodes, plates, supports, and base pins for radio tubes; component parts for the "electron gun" used in Television picture tubes; brackets, washers, eyelets, or rivets.

The bakelite parts, usually serving the function of insulators in laminated types of assemblies, are punched out of strips of bakelite.

THE METAL PUNCHING PROCESS

The metal is fed into the presses from coils which may range from the thickness of paper to the thickness of a half dollar – – and in widths ranging from 1/16 of an inch to 7 inches.

Punching speeds range from 4,000 strokes per hour to 20,000 – – depending upon the intricacy of the part being punched, the material used, and the construction of the die. Often, when the material is thin enough so that it will buckle when its progress through the die is impeded, the buckling action is used to trip an automatic shutoff which stops the press in the event that a jam occurs.

Presses equipped in this manner are usually located in a group so that one operator may attend as many as six. The other presses require the services of a full-time operator who will shut off the press as soon as a jam occurs in order to prevent damage to the die.

THE BAKELITE PUNCHING PROCESS

Bakelite, as a rule, is purchased in sheets four feet square. It is made in several degrees of hardness and in thicknesses ranging from 1/64 of an inch to 1/8. Since bakelite is punched from strips, it must first be sheared. Most thicknesses above 1/64 of an inch require pre-heating in an oven to prevent fractures in the shearing operation. The strips must again be pre-heated just prior to punching.

Speeds for punching bakelite are in approximately the same range as metal stamping. The bakelite strips may be fed automatically where volume justifies equipping the press with an automatic feed, or by hand. Two automatically fed presses can be attended by one operator if he has no auxiliary operations to perform. Hand feeding, of course, requires a full-time operator.

TYPES OF PRESSES USED

Depending upon the part being fabricated, the press sizes may range from 10 tons to 60 tons. Equipment may be of a type using a simple two-part die wherein two halves come together to complete a part with each stroke (or in progressive stages), or of the type utilizing four to seven part tools, including notch dies and forming tools (multi-slide), which not only blank and form parts but form lock seams and riveted edges.

The type of press is important in costing because costs will vary depending upon press types. As a rule, the larger the press, the greater the hourly cost of operation.

MATERIAL CONTROL THROUGH CONVENTIONAL STANDARDS

In a conventional standard cost system, material standards would be developed in the following manner: the material requirements for each part would be determined by calculating the weight of the blank size and adding an allowance for end pieces on the coils. This would then become the standard allowance for material.

The month's production of each part (assuming a monthly control period) would be multiplied by the standard material allowance for each part. The total standard allowance would then be compared with the actual amount of material consumed during that month. The difference between the standard allowance and actual consumption would be the variance from standard. Material variances are usually broken down by type of material, but could be broken down into any category in which it is possible to break down the actual consumption.

LABOR CONTROL THROUGH CONVENTIONAL STANDARDS

The standard labor allowance for each part would be calculated by dividing the index speed of each part (after adjustment for downtime due to material changes, adjustments, and personal allowances) into the operator cost per hour. This labor allowance, like the material allowance, would be extended by the total production of each part to arrive at a total standard labor allowance. This would be compared with the actual payroll cost for the month--the difference between the two being the variance. Labor variances are usually broken down further by machine groupings.

The control of such items of cost as die maintenance, packaging costs, and scrap recovery would be accomplished in the same manner.

EXERCISE OF CONTROL WITH CONVENTIONAL STANDARDS

Thus management would control under the exception basis--through analysis of the larger unfavorable variances. Smaller unfavorable variances and favorable variances would be ignored, allowing more time for investigation of the excess costs which warrant the attention. When one considers that thousands of small parts used in the electronics industry have a value of less than $5 per thousand, there is some question as to the justification of maintaining material standards, labor standards, packaging, and scrap recovery standards for each part on an individual basis.

For purposes of costing and control it would be more economical to use group standards. The five-point control, a description of which follows, is based on the "group standard" principle of control.

CONTROL POINT 1 – THE DAILY PRODUCTION REPORT

If production can be called the heartbeat of business then the production report must surely be the pulse. Every company, regardless of size, prepares some form of production report. A proper summarization of the figures contained in this report can provide valuable information for management guidance.

In machine-paced operations, such as small parts stamping, the degree of attainment of standard production per hour is a fairly good index of labor, material, and overhead attainment. If out-of-spec material, for example, causes frequent shutdowns of the press, actual production per hour will be low, as will labor, material and overhead attainment of standard. Therefore, control of production per hour, to a large extent means control of all the elements of cost which go into the product.

HOW TO SET UP CONTROL POINT 1

Since control will be based on grouping and comparing actual production per hour with standard production per hour for the group, the first step is to determine the control groups needed.

Control groups may be broken down by press type i. e. large press, medium press, small press, multislide. However, if certain parts within a group have extreme ranges of production speed which would tend to distort the average, these would be shown separately or the group would be broken down into further groupings.

Another type of control would be a check on volume of hand fed operations. In bakelite punching, particularly, there is often a temptation to hand feed strips rather than take the trouble to set up automatic feeds which can triple the production per hour. Although it would not pay to make an automatic set-up in many instances, the number of press hours devoted to this type of production should be kept at a minimum. The control would be in the nature of a percentage which would show what portion of the press hours for the period were devoted to production of parts which were hand fed. Exhibit 1 illustrates a production report based on the principles outlined above.

Exhibit 1

DAILY
PRODUCTION REPORT

Period: June 10, 1958	Quantity	Press Hours
MULTISLIDE SECTION		
32-45489 Plate	3,520,000	700
57-13462 Shield	175,000	16
57-14396 Plate	180,000	17
57-15343 Shield	225,000	21
46-14346 Support	2,512,000	500
45-13345 Support	31,000	17
LARGE PRESSES		
23-12482 Contact	200,000	70
25-12531 Saddle	340,000	60
23-12532 Bracket	44,000	5
24-45431 Saddle	120,000	13
23-35344 Shield	19,000	8
MEDIUM & SMALL PRESSES		
26-00120 Top Insulator	20,000	4
26-01023 Bottom Insulator	40,000	17
27-41362 Insulator	800,000	50
28-34633 Contact	900,000	90
26-32134 Contact	32,000	32
27-33347 Insulator	20,000	9

PRODUCTION SUMMARY & CONTROL

	No. of Pieces	Press Hours	Press Hours % Total	Actual Pieces Per Hour	Std. Pieces Per Hour
Hand Fed Operations	175,000	70	1%	2,500	16,000
Multislide	15,000,000	3,000	64	5,000	8,000
Large Presses	1,000,000	325	7	3,100	3,500
Medium & Small Presses					
Group 1	2,500,000	714	15	3,500	6,000
Group 2	6,000,000	600	13	10,000	9,800
		4,709	100%		

HOW MANAGEMENT WOULD USE CONTROL POINT 1

Exhibit 1 shows hand fed operations as the first item in the summary section. 70 press hours were devoted to this type of punching -- or 1% of the total press hours for the period. While this percentage remains at less than 2% it would be considered normal. However, were it to go above 2%, a check would be made to determine if some of the runs could not have been done on an automatic basis.

Multislide production shows an attainment of 5,000 pieces per hour compared to a standard of 8,000. To arrive at the reason for the low attainment, the multislide production for the period would be checked to determine whether a few slow-running parts have pulled down the average or whether a bad lot of material was responsible for numerous shutdowns.

Large press production shows an actual production of 3,100 pieces per hour compared with a standard of 3,500. In view of the low attainment of multislide production, most of the attention would be devoted to that group -- especially since the percentage of attainment for the large presses is close to 90%.

Medium and small press production is broken down into two groups because a single grouping would take in too wide a range of speeds.

Group 1 shows a very low attainment (3,500 per hour versus a standard of 6,000). There could be a number of reasons for this. A few are:

1. New tools on a group of parts requiring slower operation during the "break-in" period.
2. "Out-of-Spec" material causing frequent stoppage.
3. Jamming of parts in the die.
4. Frequent adjustments due to high tolerance requirements of many of the parts being run.

Group 2 shows better than standard attainment so it would receive no further attention.

CONTROL POINT 2 – PRODUCTION HISTORY

Although Control Point 1 provides controls on a group basis, further controls on an individual basis are needed in order to insure adherence to good cost-selling price relationships.

The production and press hours of the parts shown on the production report are posted to individual production history sheets shown as Exhibit 2. Each production history sheet will record the history of a part on a month-by-month and year-to-date basis for a 12-month period.

Exhibit 2

PRODUCTION HISTORY

Part No. 28–34634

Material .020 x .500 Brass

Standards:
Prod. Per Hour 11,500
Die Maintenance
Per 1000 parts .035

Month	Production	Press Hours	Prod. Per Hour	Die Maint. Hours	Die Maint. Hrs. per M.
January	13,642,425	1,204	11,331	491	.036
February	10,186,243	973	10,469	413	.040
Year to Date	23,828,668	2,177	10,946	904	.038
March					
Year to Date					
April					
Year to Date					
May					

Die Maintenance hours are recorded on the same sheet. If dies are interchangeable between two parts, or if there is more than one die of the same part, separate history sheets would be used for posting each die number or section.

The production column would be divided by press hours to arrive at the production per hour. Die maintenance hours would be divided by total production to arrive at die maintenance hours per 1000 parts produced.

HOW MANAGEMENT WOULD USE CONTROL POINT 2

The two control figures watched by management would be production per hour and die maintenance hours per 1000 parts.

Production per hour would be compared with the standard shown at the top of the production history sheet as would die maintenance hours per 1000 parts.

In Exhibit 2, the month of January shows a production per hour of 11,331 compared with a standard of 11,500. In February, the production per hour shows a drop to 10,469. Although management would not be concerned by the January comparison of 11,331 with a standard of 11,500, the drop to 10,469 in February would bear further investigation.

Die maintenance of .036 hours per 1000 in January compares favorably with the standard of .035. However, the increase to .040 hours per 1000 in February would warrant further investigation. Undoubtedly the drop in production is closely tied to the increase in die maintenance. Although a figure of .040 hours in itself might not appear to be startling, die maintenance is one of the largest single items of overhead in a metal stamping operation. An unusual amount of die maintenance could mean that:

1. The die, if not sectionalized in its construction, has reached a point in its life when it would be cheaper to build a new one than to continue further maintenance.
2. The design of the die is poor.
3. The die is being run too fast or is being run in a press which is too light, thus resulting in excessive vibration.
4. Worn pins and bushings in the die shoes can result in mismatching of the two halves.
5. Worn rams can cause inconsistency in the quality level, thus resulting not only in excessive die wear but in high shrinkage of production.

The production history record is a very important control because, as mentioned previously, if we attain optimum production speeds in a machine paced operation, we have reasonably good assurance that material, labor, and overhead are under control.

CONTROL POINT 3 – MATERIAL SUMMARY AND SCRAP CONTROL

The material control report is prepared on the basis of type of material consumed, i.e., nickel, brass, phosphor bronze, copper, steel, or bakelite. Consumption is based on issues to the production floor with adjustments for inventories remaining in the work areas. Essentially, the control feature is based on weight of material consumed, of a particular type, per 1000 parts produced. This figure is compared with the group standard.

Exhibit 3 shows pounds of material consumed by each type. It may be feasible in some instances, as was done in the case of brass, to break the material down by ranges of thickness or width in order to pinpoint excessive usage with greater accuracy. In some cases only one or two dominant items may distort the average, in which case the offending items would be shown separately.

No definite rule can be applied as to the optimum number of groupings which should be set up. This would vary from period to period depending upon the parts being run. As a rule, more groupings would be set up for the more expensive materials such as nickel, tinned brass, and berylium copper. On the other hand, steel which is less than 1/10th of the cost of the above metals might not be broken down into groups at all.

Proceeds from the sale of scrap punchings can amount to as much as 10 to 15% of the value of material consumed in production. As a rule, scrap is kept in controlled areas and the weights are recorded in the accounting department each time a container is moved to the storage area. Whenever a sale is made to a scrap buyer, the accumulated weights are compared with the weight recorded by the scrap dealer. Although bakelite scrap has very little value and is usually thrown out, it is shown on the report as an index of material usage.

The figures shown as pounds of scrap represent punching scrap, end pieces, and defective parts. Obsolete coil stock would not be included in the report. The total pounds of each type of scrap would be divided by the total pounds of each type of material consumed to arrive at a percentage of scrap to material consumed. This percentage is compared to a standard percentage established from past experience.

Exhibit 3

MATERIAL SUMMARY & SCRAP CONTROL

	Pieces Punched	Pounds of Mtl. Cons.	Pounds/M Parts	Allowable Pounds/M Parts	Pounds of Scrap	Percent Scrap to Mtl. Cons.
Nickel	10,000,000	5,000	.50	.45	2,000	40%
Brass						
Group 1 – .010 x .500	20,000,000	15,000	.75	.60		
Group 2 – .020 x 2.00	15,000,000	30,000	2.00	2.01		
Group 3 – All other	5,000,000	1,000	.20	.21		
Total Brass	40,000,000	46,000			18,400	40%
Phosphor Bronze	3,000,000	2,000	.67	.65	500	25%
Copper	7,000,000	3,500	.50	.48	1,000	29%
Bakelite	20,000,000	10,000	.50	.46	4,200	42%
Steel	30,000,000	10,000	.33	.30	8,000	80%
*Total	110,000,000	76,500			34,100	

*Total figures of statistical interest only.

HOW MANAGEMENT WOULD USE CONTROL POINT 3

The first step would be to compare the pounds of material consumed per 1000 parts with the standard for the group. In the case of nickel, the actual weight was .50 pounds and the standard .45 pounds — an unfavorable variance of .05 pounds per 1000. In the case of brass, which is broken down into three groups, Groups 2 and 3 show a favorable variance while Group 1 shows an unfavorable variance of .15 pounds per 1000 parts produced.

Although the variances could readily be converted to dollar amounts the weights as shown in Exhibit 3 provide a sufficient amount of information to highlight the excess material usage, so that further investigation can be undertaken. The percentage of scrap to material consumed would serve only as a rough indication as to whether there were any dishonesty in the disposal of scrap.

CONTROL POINT 4 – WEEKLY LABOR AND EFFICIENCY REPORT

This report shows labor cost per 1000 by type of operation compared with the group standard cost per 1000. As a rule fully automatic operations in which the press stops automatically when material jams or runs out can be consolidated into a single group. The labor cost per 1000 in such instances would be low because one operator can operate several presses.

Operations which feed automatically but require a full-time operator to stop the press in case of trouble would be classified as semi-automatic. This group would be broken down into ranges of punching speed depending upon the parts being run in the particular period. In the lower speeds the groupings would be made in smaller steps to reduce the possibility of distorted averages because of the higher labor cost per 1000 in the lower ranges of speed.

For example, at a production speed of 4,000 per hour, at an hourly cost of $1.50, the cost per 1000 would be $.375. At 4,500 per hour the cost would drop to $.333 — a difference of $.042 because of the 500 per hour increase. A part running at 8,000 per hour, on the other hand, would incur a labor cost of $.1875 per 1000. At 8,500 the cost would drop to $.1764 — a difference of $.011 per 1,000.

Special hand-fed operations or certain bakelite jobs which require sawing operations would be shown in the third category. Exhibit 4 shows the hand operations broken down into two groupings.

In conjunction with the labor cost comparison, the utilization of equipment and machine efficiency are shown in the lower portion of the report.

Utilization would be obtained by dividing the scheduled hours by the available hours. The fluctuations in the utilization percentage could be used as an index of volume. The machine efficiency would be obtained by dividing the actual running time of equipment by the scheduled hours.

Exhibit 4

WEEKLY LABOR & EFFICIENCY REPORT

	Total Labor Cost	Total Production	Actual Labor Cost per M	Standard Labor Cost per M
FULLY AUTOMATIC	$ 1,260	15,700,000	$ .080	$ .084
SEMI-AUTOMATIC	2,205	3,500,000	.630	.590
HAND OPERATIONS				
Group 1	2,960	2,000,000	1.480	1.350
Group 2	1,480	400,000	3.700	3.655
TOTAL	$ 7,905	21,600,000		

Total Presses Available	200	
Total Hours Available	200 x 40 hrs/wk	= 8,000 hrs.
Total Hours Scheduled	150 x 40 hrs/wk	= 6,000 hrs.
Percent Utilization	6,000 ÷ 8,000	= 75%
Actual Production hours		= 5,000 hrs.
Machine Efficiency	5,000 ÷ 6,000	= 83%

HOW MANAGEMENT WOULD USE CONTROL POINT 4

Management's method of control would be to compare the actual labor cost per 1000 parts with the standard for the group. Note that the press types have lost their identity in this report. Management would view the labor costs and allowances in the light of labor required for the type of operation to be performed. If the operation were performed on the wrong type of press, the excess cost would reflect as a variance between the actual and standard cost per 1000 under one of the appropriate categories.

If the variance should become large in a particular category, the production history sheets would be consulted to check production trends for the parts involved. If a particular part or several parts were causing high variances, these could be isolated on future reports until the trouble could be corrected. If necessary, the troublesome parts would be watched on a daily basis.

In addition to the above, management would watch the percentage of machine efficiency. This figure would reflect the amount of downtime on an overall basis. An analysis of the labor cost variances would indicate which category contributed most to an unusually low or unusually high efficiency.

CONTROL POINT 5 – OVERHEAD COSTS

Overhead is applied on a press hour basis with higher rates for the larger equipment to allow for such costs as higher depreciation, maintenance, and occupancy costs. A fair amount of time is required in making the analysis used as the basis for establishment of the actual rates used for cost estimating. Although this cannot be done every month, a test of the overall press rate can be made without too much difficulty each month or each quarter.

EXHIBIT 5

CALCULATION OF ACTUAL PRESS OVERHEAD RATE

Variable Overhead		
Inspectors		$ 4,000
Stockhandlers		7,000
Equipment Maintenance		12,000
Supplies		2,000
Total Variable Overhead		$ 25,000
Fixed Overhead		
Occupancy		$ 10,000
Depreciation		6,000
Supervisors & Foreman		9,000
Clerical Staff		10,000
Total Fixed Overhead		$ 35,000
TOTAL PRESS HOURS		10,000
Press Rate per hour		
Variable	($ 25,000 ÷ 10,000)	$ 2.50
Fixed	($ 35,000 ÷ 10,000)	3.50
Total press rate		$ 6.00

Die maintenance has not been included in the above because this item of cost would be applied to the parts on an individual basis.

HOW MANAGEMENT WOULD USE CONTROL POINT 5

If the fixed overhead rate were running too high, this would more than likely be due to lower than normal volume. The solution would be more volume either through increased sales of existing products or the addition of a new line.

If the variable rate were running too high, a check would be made to determine if variable labor costs and other variable expenses had been cut in accordance with reduction of volume. Occasionally such an investigation will reveal that labor had not been cut because reduction in volume was only temporary and that it would be cheaper in the long run to carry the excess cost until volume catches up. This would eliminate excess costs at a later date when new people must be hired and trained.

Separation of the press rate into a variable and fixed portion facilitates the calculation of relative profitability of various items being quoted. As an illustration, let us take parts #22–4321 and #24–4210. The first part is punched at a speed of 10,000 per hour and the latter at 15,000. Both are run on the same type press and require a full-time operator who is paid $1.70 per hour.

	Cost per 1000	
	#22–4321	#24–4210
VARIABLE COSTS		
Material	$ .23	$ .30
Labor		
$1.70 ÷ 10,000	.17	
$1.70 ÷ 15,000		.11
Variable Overhead		
$2.50 ÷ 10,000	.25	
$2.50 ÷ 15,000		.16
Total Variable Cost	$ .65	$ .57
SALES PRICE	$1.25	$1.00
Variable cost as a % of Sales Price	52%	57%

The above analysis shows that the variable costs for Part #22–4321 amount to 52% of the selling price while the same figure for the second part is 57%. Thus 48% of the selling price of the first part remains to cover fixed costs and profit while the same figure for the second part is only 43% -- meaning that the first part would be the more profitable of the two. A systematic analysis of all major parts would point out to management which parts in the line are in need of cost reduction work.

SUMMARY

With the advent of the Electronics Age, the number of small parts fabricated each year runs into astronomical figures.

To satisfy these requirements, thousands of tons of material in varying widths and thicknesses are consumed each year; millions of dollars of payroll are expended for diemakers who fashion and maintain the intricate tools; for press operators who run the equipment; and for auxiliary personnel who perform the numerous service functions.

However, because the unit cost of these parts is so small, controls must be simple and inexpensive -- yet effective and informative. Because small parts stamping is essentially a machine-paced operation, the inability of a part to attain its standard production speed will frequently highlight trouble. The various controls described in this paper then come into play to highlight the problem area so that management will know the general area in which action must be taken.

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St. Paul, Minnesota

AN EFFECTIVE BUDGET FOR THE FACTORY WITH RESPONSIBILITY ACCOUNTING

"He who signs, gets charged" is the creed of The Toni Company in handling the difficult problem of proper departmental expense charges. By pre-establishing this method of expense allocation the budget has taken on real meaning, no longer can expense overages be explained away by trying to place the blame on someone else. The Department head develops his budget, approves the charges against his department and thus has complete control over his own performance.

Our factory, like almost every other factory, is divided into departments or cost centers each of which either is run by a department head or performs a very specific function. It was over this little word "function" wherein lay the bulk of our budgeting and budget reporting problems. It was this department's function to do this and another department's function to do that, but expenses against each particular function could be and were authorized by others than the department head whose department was charged. And, who did it? It was the accounting department, of course; for it was the accounting department who assigned the accounts to be charged as best they could in accordance with whose function each expense belonged.

Thus, the battle was waged with the budget man over what was charged against each departmental budget, by whom, how unreasonable the item or charge was, etc. And each objection was rightly taken, for in most cases the department head found out about these unusual charges after the expense had been incurred and charged against his function. The budget man defended the accounting distribution since he was placed in the position of justifying the function of the expense--also, in the earlier days of our budget, he was in charge of making the account distributions.

It was difficult to get the department heads to be very serious about their budget. Especially if someone else was incurring expenses to be charged against their activity -- how could they be held responsible for something over which they had little control? Sure, they were interested and they were concerned, but there was always that little difference like spending someone else's money or spending your own.

How to solve this problem or perhaps I should say parts of the problem, for as you know there is no single solution and neither is the problem a singular one. We first tackled the problem of who charges what and to whom. Responsibility accounting was our answer to this question.

RESPONSIBILITY ACCOUNTING

The first step in establishing responsibility accounting was to establish responsibilities. A chart of approval authorizations was prepared which outlined the limits of approval for each department head. No one except a higher authority to whom the department head reported, could authorize expenditures against his department. Each department head must have signed some form authorizing the charge to his department such as a purchase requisition, receipt for raw materials transferred, request for shipment, job orders, etc.

The guiding rule for the accounting distribution was "he who signs gets charged", which made it easy for the accounting department to assign expenditures to the department responsible. Establishing these approval authorizations was no small task. It required many meetings with department heads and top management to establish the various rules or regulations for each item of expenditure authority. This could be a small revolution within your company, but it is a good step toward an efficient management team.

There are always some exceptions to every good procedure. One of ours was on maintenance department charges. Since we charge each department a set rate per hour for maintenance time, must every job be approved by the department head charged? What about emergency repairs? At first we exempted emergency repairs only. The department heads mail baskets became filled with job orders to be approved. Maintenance department head complained bitterly about his work getting behind because job orders

were not being approved and because he had to spend all his time convincing department heads about the necessity for each repair job – (should we have to educate each department head about engineering and maintenance?). So all department heads compromised and allowed maintenance to go ahead and authorize all emergency and routine repair jobs, say under $50.00, but that all larger expenses must be approved by the department head concerned.

OVERHEAD BUDGET

Our next step was to design the overhead budget into our program of responsibility accounting. Only those expenses over which the department head has responsibility or control are included in his department overhead. The other expenses over which the department head has little or no control such as payroll taxes, group insurances, rent, depreciation, electric light and power, etc. are grouped into one department we call "Undistributed Overhead". These expenses are the direct responsibility of our Vice President in Charge of Manufacturing and are reported to him as his department.

These expenses are, in turn, summarized as "allocated overhead" and reported to the various department heads as a below the line operating expense of Payroll Fringe Benefits, Space Costs, and Equipment Costs as illustrated in Exhibit 1. As bases for these allocations we have used per-cent of salaries and wages for Payroll Fringe Benefits, square feet of area for Space Costs, and dollar value of original cost for Equipment Costs. This gives the department head the full realization of the total dollar costs of his department. Also this renders variability (department-wise) to relatively fixed items (plant-wise).

The Toni Company - St. Paul Factory **Dept.**

MONTHLY FACTORY OVERHEAD BUDGET STATEMENT

Acct. No.	No. of Working Days Direct Labor Dollars Account Description	Month	Budget Variance	Year-To-Date	Budget Variance
125	Salaries				
130	Outside Service - Labor				
152	Clerical				
153	Indirect Labor				
154	Premium Pay				
235	Travel Expenses				
280	Product & Equipment Testing				
290	Indirect Materials				
300	Supplies				
360	Uniforms				
640	Samples				
739	Licenses & Misc. Taxes				
785	Outside Services				
800	Company Relations				
801	Employee Relations				
825	Maintenance & Repairs				
826	Maintenance Dept. Labor				
850	Rental of Equipment				
860	Telephone & Telegraph				
905	Dues, Subscriptions & Publ.				
970	Charges to Other Depts.				
971	Charges from Other Depts.				
975	Charges to Suppliers & Others				
	Total Direct Factory O'head				
	Allocated Overhead:				
	Payroll Fringe Benefits (% of Payroll Costs)				
	Space Used				
	Space Costs - (cents per foot per month)				
	Equipment valuation at original cost				
	Equipment Costs (cents per valuation per month)				
	Total Departmental Costs				
	Manufacturing Variance - Service Departments				
	Approved Authority for Expenditures				

The factory departmental overhead budget is prepared as follows. Several months before the next year's budget is required from the department head, we begin preparing budget worksheets – detail worksheets for each expense account which are assembled into sets. Two sets are made up for each department, one of which will be returned to the budget department and the other is to be retained by the department head as this contains the bases, notes, estimates, and other relevent computations for each particular expense account. Only those expense accounts over which the department head has responsibility or control are included in his department overhead. A sample of the Indirect Materials worksheet is Exhibit 2. This will give you a brief idea of what we call departmental budget worksheets.

1958 BUDGET – Indirect Materials

Department

September, 1957

Indirect Materials budget includes all general materials used in the production processes which cannot be definitely assigned to a given unit of production such as staples and glue. This also includes the costs of certain direct materials used which are insignificant and difficult to allocate to the manufactured product such as certain dyes. These items are carried in inventory with a "No Value" cost.

1/12 of annual budget will be allocated to each month unless you indicate otherwise.

ITEM	QUANTITY	UNIT COST	DATE OF PURCHASE	TOTAL COST

BUDGETARY OBJECTIVES

Now, in order to budget, you have to know what you are budgeting for. From our sales and market research departments, we are provided with a sales and production forecast which is to become the base for the factory overhead budget. Armed with this strategic information we proceed to the Vice President in Charge of Manufacturing to brief him on our budgetary approach and to agree on the budgetary objectives for the year's budget. The Vice president calls a staff meeting to review and brief the objectives for the year's budget.

Here is where the overall objectives are agreed upon – here is expressed the approach management is taking toward budgeting; but it is at the department head level that the real budget control is exercised. He must develop his budget to meet management's objectives and attain the budgeted level of production without sacrificing quality. And, if these two objectives are not compatible, then it is his responsibility to prove what he needs for an efficient and progressive operation. A good budget is good because top management supports and demands it – it then becomes a valuable tool for upper, middle, and lower levels of management alike.

BUDGET PREPARATION

Now we are ready for the budget meeting with all of the department heads. The sales and production forecast is released and discussed sufficiently so that it is understood and all questionable items defined for budgetary purposes. The departmental budget worksheets are distributed and discussed as necessary – actually the worksheets are designed either with explanations or are self-explanatory. The budget department is available to give every assistance possible to the department heads in preparing their budgets.

Let me emphasize here that it is the department head's budget – this is his plan of operation to meet the budgetary objectives – he must substantiate his budget requests and he must control the expenditures. We will give every bit of assistance and information available from past records, current costs, and correlation with other departments.

We have smiled, been polite to the extreme, bowed, cheered, and been generous with the services of our department in seeing to it that the budget worksheets get into the hands of the department heads and that they get "the word" on the year's budget preparation. It is now necessary to take on the role of a "hound dog" and get the departmental budgets according to the time schedule. As all budgetmen well know, you just don't get a set of worksheets returned and then overnight sit down and convert them into an intelligible, complete to all details, analyses for presentation to a vice president.

As the department turns in the budget department copy of their budgets, we review each budget for completeness of the items and supporting data as well as looking for correlating items with other departments. Each budget is reviewed with the department head. This serves two functions. It is a thorough going over of the budget with the person who originated it and also with the budget accountant who is in a position to point out unusual items which may need more substantiation in order to be approved, items which may have been omitted or which will be necessary in order to tie in with other departments. Second, it is a preparation and review for the soon coming meeting of that department head with the vice president, at which time it is imperative that all budget requests, particularly new, unusual, or large expense items be thoroughly supported and intelligently explained in order to obtain the necessary approval or convince the vice president that any budget cuts be applied elsewhere.

Next step is to prepare any preliminary analyses of the expense accounts such as number of employees, unusual expenses, large expenses, etc. These analyses and the departmental budgets are presented to the vice president so that he can get the feel of the budgets and prepare himself for the review of each budget with each department head. It is at this meeting – which, incidentally, lasts two to three days – that all items are approved; or in case of revision, the amount of the revision is agreed upon between the vice president and the department head.

After all changes are agreed upon, we prepare the final analyses of the accounts, revise the working papers of each department in accordance with the changes, and prepare the budget for the vice president's presentation to the President for his approval. If any further changes in the budget are made at this final approval meeting, any such changes are passed on by the vice president to the department head concerned – naturally, the department head will agree to the change; however, it is his duty to support his request and to keep the vice president informed as the months go by.

After the final approval, the budget is again reviewed with the department heads in order to make sure that their copy of the budget is in agreement with the final budget so that anytime in the future they have a record of "what happened" to their budget.

Only when the full cycle is completed and all parties are in agreement as to objectives and plans do we consider the task of developing an effective budget with responsibility accounting accomplished. We recommend the preliminary steps of establishing responsibility accounting as a prelude to good budgeting.

1959 CONFE

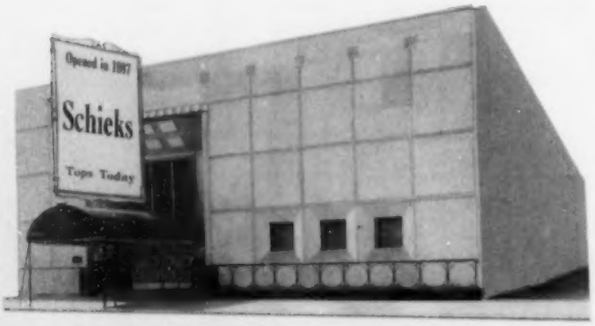
Minne

The Mississippi River cuts through the Minneapolis business district. On the far side of the river is the "heart of the loop." In the foreground is one of the flour mills which are a keystone of the city's industry.

The Twin Cit
members of NSB
conference. A b
for members with

One of the newly decorated rooms reserved for the NSBB Conference at the Hotel Leamington. The hotel is on the edge of the loop in open, quiet surroundings.

Scheik's Cafe is a city landmark. Although the front has been modernized, the interior is the same as it was 72 years ago. Twice nightly The Singing Sextette offers hour long minaturizations of popular operettas.



"Be in Line for '59"

Nicollet A
of the north
specialty sh
Street shows

NFERENCE — TWIN CITIES

HOTEL LEAMINGTON

Minneapolis May 21 – 22, 1959

Twin Cities' Chapter most cordially invites the ers of NSBB and their wives to this year's annual ence. A bang-up technical program is in prospect embers with evening time recreation for all.

Vern Kowalsky
General Chairman

The Minneapolis Acquatennial is news later on in the summer. Here is a picture of last year's royal party. The acquatennial queen, princesses and the acquatennial commodores.

Nicollet Avenue is sometimes called the "5th Avenue" of the northwest because of its solid front of stores and specialty shops. This picture at the intersection with 7th Street shows the center of town.

Southdale is one of the few shopping centers with a covered court between buildings. Here it is always 70° with trees in leaf and birds singing. Its Garden Court Cafe is very much in the French style.

By: George E. Livings
Controller, Semi Conductor-Components Div.
Texas Instruments, Inc.
Dallas, Texas

PARTICIPATIVE PLANNING IN A DECENTRALIZED ORGANIZATION

Coordinating profit plans in a decentralized company is the problem faced by Texas Instruments, Inc. Their solution to this problem is in the adoption of Participative Planning. Each division is responsible for its own profit plan, and, therfore, each level of management must think beyond Today's problems for their division, and thereby contributes to the overall forward planning of the Company.

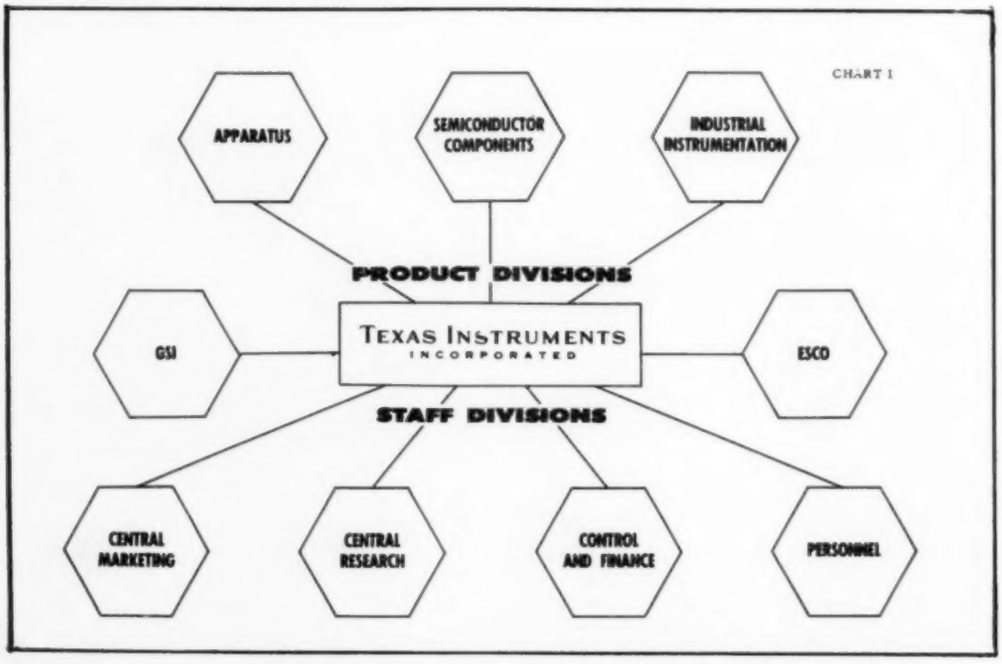
Texas Instruments has grown from a sales volume of $3 million in 1947 to the $90 million level in the year just past. One of the cornerstones of our management policy has been profit planning. By profit planning we mean bringing together standards, budgets, estimates, etc. at all levels of the organization and expressing them as an integrated plan for achieving the company's profit goals.

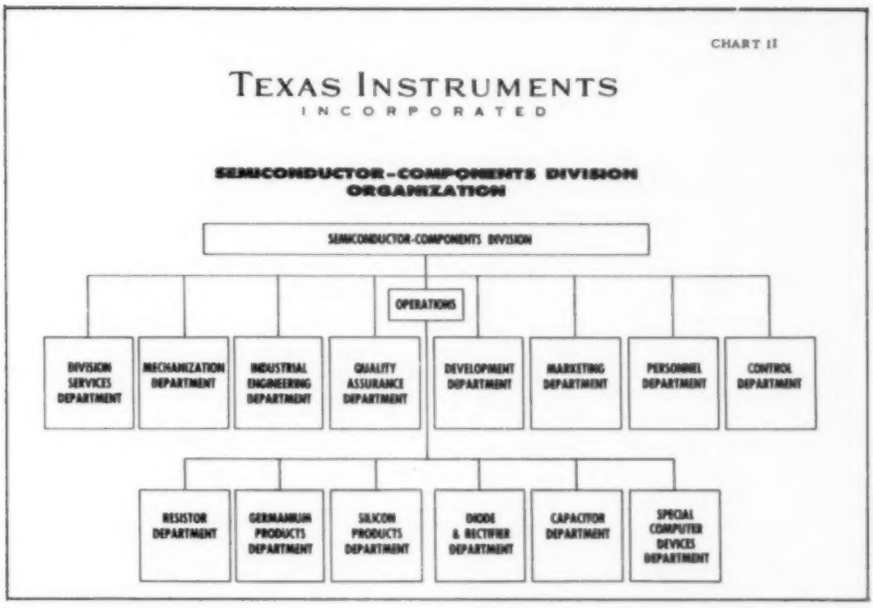
Another outstanding facet of company philosophy is our decentralized organizational structure. We operate five product divisions as highly autonomous business enterprises. (See Chart I). These divisions have their marketing, production, engineering, accounting and administrative functions. The staff divisions formulate general corporate policy, conduct general research and handle corporate financing. Furthermore, in the Semiconductor-Components Division we carry the decentralized philosophy of profit responsibility one step further and have six product departments. (See Chart II). These product departments receive services and some policy-formulation assistance from the eight staff departments in the Division.

As a result of this high degree of decentralization, profit planning at TI is highly participative. Division managers operating within the general framework approved by top management prepare their own plans. Another characteristic of TI profit planning, which grows out of its participative aspect, is that our plans are based on difficult but attainable goals rather than representing idealized or hoped-for performance.

Our profit planning consists of:

1. A five-year plan.
2. Annual plan.
3. A rolling four month forecast. (prepared monthly)





ANNUAL PROFIT PLAN

This article will be restricted to a discussion of the Semiconductor-Components Division's annual profit plan.

Our annual planning begins in September each year with a forecast by our corporate marketing staff of economic conditions for the ensuing 15 to 18 months. At a formal meeting shortly thereafter our Market Research group presents to our division management the estimated size of the markets in which we sell and average prices for the coming year.

Planning for new products is a continous - and major - process at TI. As part of the annual profit plan our product department managers evaluate their new product plans for the coming year in the light of the forecast general economic conditions and the demand for each product line. These plans are then formally presented to division management for a general and tentative approval. Included in this presentation are the specifications and engineering effort required on each new product planned for the coming year and its date of introduction to the market.

The product departments then prepare their sales plans based on the general economic forecast, the market forecast and their new product plans; the sales plans thus developed are presented for approval by the division manager at another meeting held in early October.

Some of the criteria which are used to evaluate the plans submitted at this time are:

1. Comparison with historical volumes, prices, percentages of market sold, and rates of growth.

2. Comparison with approximate breakeven volumes for each product line.

TEXAS INSTRUMENTS – S-C DIVISION
PLANNING SCHEDULE

WHAT	WHO	WHEN
1. Economic Forecast	Corporate Marketing	Early September
2. Market Forecast	Division Marketing	Early September
3. New Product Plans	Product Departments, Corporate Research & Division Development	September
4. Sales Plan	Product Departments	Early October
5. Operating, Personnel and Capital Plans	All Departments	November
6. Division Profit Plan	Division Manager and Department Heads	Late November
7. Approval of Profit Plan	TI Executive Committee	December

DETAIL PLANNING

As soon as sales plans are approved, planning starts in dead earnest. Our product departments plan unit direct labor and direct material costs as well as the total cost of production by month for the year. These data are developed largely from historical costs plotted on learning curves--giving effect to planned process changes and major cost reduction programs. From this information those departments can determine their manufacturing personnel requirements and plan the size and cost of their administrative and engineering groups.

The product department also determines the variable and fixed factors in each of its manufacturing overhead accounts. These factors are generally determined from scatter graphs of historical relationships between the variable overhead and direct labor dollars.

From these data our Planning group in the Control Department can compute the planned cost of production, cost of sales (including variances from standard), inventory levels and departmental profit.

Each of the staff departments – using the new products plan, the sales plan and the product departments' planned personnel levels as a guide - prepares its plan of departmental personnel and overhead cost by months for the coming year.

As the staff departments' plans are completed, their costs are charged - or allocated on the most appropriate base - by the Planning group to the various product lines so as to develop division planned profit by product line.

Chart IV is a pro forma copy of the division profit plan showing division totals and a breakdown to two product lines. The plans prepared by the staff departments are indicated by footnotes; the mechanization program is planned jointly by the product departments and the mechanization department.

CHART IV

TEXAS INSTRUMENTS
S-C DIVISION

		TOTAL	PRODUCT A	PRODUCT B
Net Sales Billed		3840	2940 (a)	900 (a)
Mfg. Cost of N.S.B.	Direct Material	710	450 (a)	260 (a)
	Direct Labor	430	380 (a)	50 (a)
	Applied Overhead	340	250 (a)	90 (a)
	Manufacturing Cost	1480	1080	400
Gross Product Margin		2360	1860	500
% of Net Sales Billed		61%	63%	56%
Product Dept. Oper. Expense	Administrative & Engineering	380	340 (a)	40 (a)
	Mechanization	215 (c)	200 (c)	15 (c)
Product Department Profit		1765	1320	445
Division Operating Expense	Control	60 (b)	50	10
	Industrial Engineering	45 (b)	40	5
	Personnel	100 (b)	80	20
	Marketing	165 (b)	150	15
	Development	150 (b)	50	100
	Division Services	280 (b)	250	30
Total Division Profit		965	700	265
% of Net Sales Billed		25%	24%	30%

(a) Planned by Product Departments.
(b) Planned by Staff Departments.
(c) Planned jointly by Mechanization and the Product Departments.

Concurrently, with its development of operating, overhead and personnel plans, each department has been preparing a capital expenditure plan in some detail and our Division Services Department – using division personnel plans – has been computing building space requirements.

We now have the framework of our profit plan – billings, costs, profits and assets invested by product line. These complete plans are presented at another formal management presentation (Item 5 on Chart III) for approval by our Division Manager. The criteria for approval are:

1. Profit as a % of billings and as a % of assets invested.
2. Historical comparisons of:
   a. Unit costs of direct labor and direct material.
   b. Operating and staff overhead expenses as a percentage of billings and of direct labor cost.
   c. Indirect personnel in the various functions as a percentage of total personnel.
3. Analysis of rate of return on major capital expenditures.

After approval at the division level, these plans are forwarded to our Corporate Central Control and Finance group for consolidation into overall TI plans.

APPROVAL OF PLANS

Shortly thereafter - generally in late November - The Semiconductor Components Divisionpresents its operating results for the current year and its plans for the coming year to the TI Executive Committee at another (the fifth) formal presentation. At this time the Division Manager and each of his department heads review their operations and present their plans in an all-day session. We feel that this presentation is important not only because it carries through on the participation motif but also because it is a two-way management development tool:

1. It acquaints top management with the pertinent facts of each division's plans and operations and permits them to evaluate the quality of the division's management team.
2. On the other hand, it develops our department heads by requiring them to analyze, and to present to top management in a formal manner, their current and planned operations.

The plan – as approved by the Executive Committee at a meeting shortly thereafter – is returned to the division and serves as authorization for expenditures and personnel additions during the following year. The profit plan will also be used each month to evaluate actual performance at all levels of the division.

END PRODUCT OF ALL PLANNING – PROFITS

By this approach we have a "closed loop" control system – that is, plan, report actual against plan, compare and take corrective action. Our various managers prepare the plans that are later used to measure their actual performance.

By this method we believe that we gain three important benefits:

1. The quality of our plans is higher since they are made by those who know the situation first hand.
2. Plans are accepted by our managers as reasonable and attainable, (although our people set some very challenging goals for themselves).
3. By having each level of management develop its own plans, we cause them to think beyond today's problems and thereby contribute to their development as managers.

"Most Folks," Said Abraham Lincoln,"
"Are As Happy As They Make Up Their Minds To Be."

By: Harold W. Fox
Dept. Head of Management Services
Rowe Manufacturing Co., Inc.
Whippany, N. J.

A BRIDGE TO MARKETING

Ideas churn around in all men's heads but some feel more disposed to set them down in black and white. Such is the case with this challenge to the Budgeting Fraternity. The author presents the problem of measuring marketing efforts in terms of engineering standards and suggests perhaps a new title of marketing engineer. The article is short in length, but long in Quality.

The immediate outlook is for higher sales and earnings. This favorable climate may be an ideal time not only to strive for optimizing tomorrow's revenue but also to prepare for the unknown days after tomorrow.

How vulnerable is a marketing program when sales decline? In many companies, large and small, management weathers short-term adversity by slashing advertising appropriations, firing salesmen, and cutting expenses such as travel and telephone. If market conditions or departmental effectiveness have obsoleted existing channels, such drastic moves may strengthen the company.

Untold harm will result, however, if costs are cut indiscriminately instead of as part of a forward-looking strategy, i.e., flexible budgets. It may be that media with the latest cancellation dates and salesmen in development territories will bear the brunt of an unbudgeted expense reduction campaign. The danger is that, while inefficiencies are sheltered, the expenses saved are just the investment required for the company's longer-term growth. The harm is "untold" when nobody in the company can document the probable impact of an interruption in advertising or in territorial coverage. And who knows whether a trip or telephone call "pays?" These types of effort have been tagged as intangible, and there is considerable resistance to their recognition.

Yet, in a competitive economy, management cannot afford to be ignorant about the effectiveness of expenditures. Neither does immunity from enlightened budgeting serve the real interests of the director of marketing. The discovery of input-output relationships in his department would furnish the marketing director with an administrative and strategic tool for greater profit contribution. Thus, the application of intensive marketing expense evaluation would tend to raise his stature. However, the formal installation of distribution costs budgeting, analysis, and control has thus far not been widespread.

It is legitimate to object against accountants deciding how many salesmen should be in a territory or appraising their performance. But this is what the marketing executive allows to happen, by default, when he is unprepared for a panic-induced cost reduction. This is not to suggest that there is a general formula available for solving business problems. But some pioneering in ferreting out facts as a guide to decision-making has been done, and the techniques could be applied in a formal program of marketing cost accounting.

In numerous companies, the effectiveness of manufacturing operations is continuously measured and reported. Modern business management has spanned the technical gap between production and accounting to provide a combination of familiarity and objectivity. Industrial engineering is that bridge. Analyzing operations, the industrial engineer recommends methods to serve production, and standards as criteria for accounting. A similar bridge, to marketing, seems to be a real need.

Perhaps the marketing research department, perhaps a new marketing engineering area should be the link. The point is that the service should be staffed with marketing personnel to secure the benefits of their experience and understanding. Beyond centralized liaison to accounting, its function should be comprehensive internal and external research to recommend the efficient deployment of funds under conditions of changing opportunities. This course would provide a documentation of factual and financial soundness to the marketing director's plans which he may find more persuasive at management meetings than eloquence. Preparedness for erratic shifts of the market should strengthen the marketing director's control over his department and enable him to capitalize quickly on new developments.

The marketing area cannot be excluded from total business planning as exemplified by flexible budgeting. The present challenge is for budget administrators to blueprint a bridge to marketing and facilitate the transition to integrated cooperation.

By: R. W. Campbell
Budget Director
Northwest Airlines, Inc.
St. Paul, Minnesota

COST PLANNING AND CONTROL THROUGH MANPOWER PLANNING AND CONTROL

A specific step rather than a whole program is explained in this article. The author does not advocate the system of manpower control as a solution to everyone's control problem, but if your costs are heavily weighted down through high manpower costs the ideas expressed herein may help your planning and control.

Our business is scheduled air transportation. Northwest's airline routes extend from cities on the east coast of the United States to the Pacific Northwest, to Hawaii, through western Canada, to Alaska, across the Pacific and to six countries in the Orient. Our employees are based in fifty different cities along this route. Payroll and payroll related costs account for approximately 50% of our operating expenses excluding depreciation of fixed assets. Planning and control of manpower to minimize operating costs are mighty important to us.

Wage rates for the majority of our employees are determined through negotiations between the labor union representing the employees and the Labor Relations Division representing the company. The control of labor costs by administrative supervisors in the company are principally through their planning and control of the number of employees to be assigned to the organization and their control of premium or overtime hours. Because the cost per employee has increased each year and because the sale price of our product has remained about the same, we have had to offset the increased unit costs of labor by more efficient use of labor. We maintain close watch on our progress in this respect and the success we have obtained is most encouraging.

Through our Budget Office each administrator who is responsible for planning a budget for his operation is furnished an over-all operating plan for the budget period. This plan includes flight timetables, the number and kinds of aircraft to be used, aircraft hours to be flown, available seat miles and available ton miles to be produced, etc. To the best of our ability we try to furnish each administrator with enough specific information so that he may take off from that point to make the detail plans for his organization.

The budget prepared by the organizational supervisor will show his forecasted operating costs based on his operating plan by detail labor and non-labor account classifications. He will also budget the number of employees by account classification for each month of the budget period. Supporting these budget figures are worksheets to show how he arrived at his manpower staffing, overtime planning, and computation of the dollar amounts budgeted.

The proposed budgets are analyzed by the Budget Office for the purpose of recommending acceptance or changes to the budgets submitted. To analyze the number of employees budgeted, employee utilization standards are used as much as possible. We also compare the budgeted manpower and workload or production figures with prior period actual manpower and production figures to help determine the reasonableness of the proposed budget.

After the budgets have been accepted, any changes in manpower planning are cleared through the Budget Office. If, during the budget period, we decide on an operation substantially different from the operation plan used for preparing the budget, a recomputation of employee requirements are made in those areas likely to be affected by the change. The changes must receive approval as did the original budget.

From our records of approved manpower deviation from the original budget plan, we are able to readily forecast the operating expense differences from the budgeted expenses. This, of course, assists us in keeping top management advised of the most current forecasted operating results for the immediate future. Some of the advantages we have gained through manpower planning and control are:

1. Staffing is based upon investigation and study. When the supervisor is required to give reasons and justify the reasons for his staffing requests and recommendations, he is compelled to investigate and study the prob-

lem before making a recommendation.

2. Operating policies and procedures are frequently reviewed. By making searching inquiries to get the real reason as to why employees are required, we sometimes find that a change in policies or procedures within that organization or another organization of the company may eliminate the need for some employees. Often times policies or procedures are established during a period of quite different conditions, therefore a review or re-evaluation of these policies or procedures should be made frequently.

3. Employment is more stabilized. By planning the manpower needs for many months ahead, it often times becomes clear that through the proper scheduling of employee vacations and through the shifting of workloads where possible, we can avoid many employee reductions and increases throughout the planning period.

4. We have the opportunity for better selection and training of new employees. By planning for personnel needs far enough in advance of the date such needs will actually materialize, the company has a better opportunity to do a more effective job in procuring and training new employees.

5. Budget follow-up is speeded up considerably. We are able to obtain very current reports of the actual number of employees compared with the budget through our IBM card system. Deviations from the budget that may require explanation can be detected long before our accounting statements are available for examination.

I want to be careful to point out that manpower planning and control is only a part of our overall budget program, but it is a key tool used to help meet our profit objective.

About Our Authors

THOMAS S. DUDICK, author of the article "Control of Small Parts Stamping in the Electronics Industry" was employed by Allen B. DuMont Laboratories as Budget Director at the time of his authorship of this article, however, he is now connected with Raytheon Manufacturing Co., Waltham, Massachusetts as a Staff Cost Consultant. Mr. Dudick is a graduate of New York University and has written a number of articles dealing with cost and budgeting. He is a previous contributor to Business Budgeting, and his articles have appeared in the NAA Bulletin and The Controller.

HAROLD W. FOX holds a bachelor's degree in Marketing and a master's in Accounting, and presently is Head of Management Services for Rowe Manufacturing Company, Inc., Whippany, N.J. Administrative experience in both areas has prodded him to search about for an answer to the problem he proposes in his article "A Bridge To Marketing." The author is a member of the NAA and the American Marketing Association.

HARRY D. FLEISCHER authored the article entitled "An Effective Budget for the Factory with Responsibility Accounting" almost a year ago. We feel that with the National Convention being held in the Twin Cities this would be an appropriate time to publish his article. Mr. Fleischer was graduated from the University of Minnesota in 1945 with a B.B.A. degree majoring in Accounting. After three years with Minneapolis Moline Company in the Cost Department, he joined The Toni Company, A Division of The Gillette Company, and is now in his eight year with Toni.

GEORGE E. LIVINGS is a native Texan and therefore it is not surprising to find him employed by a firm with TEXAS in its name. His present position is Controller, Semi conductor-Components Division of Texas Instruments, Inc. Previously he served as Budget Director, from 1949 to 1951, and Division Controller, Apparatus Division, from 1951 to 1956. He received his Bachelor of Science degree in Commerce from Southern Methodist University. He is married and has four children.

HAL COLTMAN

KNOW YOUR OFFICERS

National Secretary Hal Coltman is a native Middle Westerner turned Californian. Born in Chicago, Illinois, Hal moved to the Golden West in 1955 "to get away from those miserable Chicago winters".

He is an Associate in the Los Angeles office of McKinsey & Company, Inc., Management Consultants, where he specializes in the field of Management Information and Controls.

From office-boy to top-management consultant, his 23 years of business experience covers work in all phases of finance and accounting both as a consultant and as an operating executive, and has given him a broad exposure to the management control problems of government, public utilities, and a variety of industries.

Has has an MBA degree from the Executive Program of the University of Chicago School of Business, where he majored in both Finance and Industrial Management.

He was Chairman of the Los Angeles NSBB Chapter Formation Committee and served as the first President of that Chapter. At present, in addition to his office of National Secretary, he is also Chairman of the National Admissions Committee and the National Election Committee, and a member of the Council of the Los Angeles Chapter.

He is an Associate Director of Membership of the Los Angeles Chapter of the National Association of Accountants and is a west coast seminar leader for the Finance Division of the American Management Association. He has appeared as principal speaker before many technical societies and as a guest lecturer at the University of Southern California Graduate School of Business Administration.

Hal and his wife, Helen, (also a University of Chicago graduate) have three sons 16, 13, and 8. They live in their swimming-pool-equipped home in the San Gabriel Valley town of La Canada, which in Spanish means "mountain valley".

His hobbies (limited by considerable business traveling) are trout fishing in the High Sierras with his three sons; growing camellias, gardenias, and roses; and reading.

News About Members

LOUISVILLE Chapter reports good news about the following members: CHARLES YALE was promoted to Assistant Treasurer of Corhart Refractories Co., JIM GALLOWAY is now Controller of Bradley & Gilbert Co., and CHARLIE MANTEUFFEL, National Treasurer, is now Comptroller and Office Manager of Atlas Plaster and Supply Co.

Each year, in the Spring Semester, New York University School of Commerce Accounts and Finance offers a course in Budgetary Control. The course is conducted by WALTER CONSTANTINE, Manager, Budgets and Forecasts at U.S. Rubber Company, and a member of the New York Chapter of NSBB.

ELLIS W. SMITH of the Chicago Chapter has been appointed Controller of The Kendall Company's newly-designated International Division.

LEW LANDRETH, SAM WEIGLE, FRANK BESORE, "STOCK" COMSTOCK, DEWEY BORST and EVERETT YOUNT drew praises and thanks from Professor ERNEST WEINWURM of De Paul University for addressing his classes in Budgeting at the University.

Planning Committee Meeting Chicago – March 1959

Left to Right – Visch Millar, Art Moor, Larry Haverkamp, Hal Mason, Charles Manteuffel and Bill McGuire. (Taking picture - Mel Aichholz)

It has just been called to our attention that AL AMIESS spoke, several months ago, before the William S. Krebs Accounting Club of the senior class of Washington University. His title was "Budgeting for the New Year." Al is a member of the St. Louis Chapter.

RAY PRICE, Newsletter Editor of the HOUSTON Chapter, reported thusly about the status of the membership of the chapter, ".....our present roster contains sixteen names. Now fellows, this is only one member more than we had in September and we just do not do things this way in HOUSTON, TEXAS." We wonder if the Houston Budgeteers haven't moved on to bigger things, like ALASKA.

If you have any Operations Research problems, call KEN BLACK of the San Francisco - Bay Area Chapter. He completed a two weeks course entitled, "Introduction To Operations Research" presented by Case Institute of Technology, Cleveland, Ohio.

LIONEL VIALES of the SAN FRANCISCO Chapter made a thirty-day tour of London, Munich, Stockholm and Paris surveying Science Museums. The survey is related to the planned Ernest Lawrence Hall of Science at Berkeley, California.

The ROCKY MOUNTAIN Chapter sent us a newspaper clipping calling our attention to the fact that JOHN J. YEONOPOLUS of their chapter was elected Treasurer of Colorado Interstate Gas Co., Colorado Springs. John joined Interstate's accounting department in 1941 following his graduation from Colorado College, and since January, 1957 had been Director of Budgets and Rates.

We join with the DETROIT Chapter in offering our congratulations to ROBERT LAMBERT who has been appointed Supervisor of Budgets for Jones & Laughlin Steel Corporation in Pittsburgh. Bob was formerly the Assistant Controller for the J & L Stainless & Strip Division in Detroit.

The Education Committee of the New York Chapter invited college and university students from Pace College, College of the City of New York, Brooklyn College, New York University and Columbia University to attend their March meeting to acquaint them with the work of our Society.

HOSS PEARSON of the Los Angeles Chapter has been appointed to the post of Secretary and Assistant Treasurer of the O'Keefe and Merritt Company. We add our congratulations to those of the Chapter.

CHARTER PRESENTATIONS

JOLIET-KANKAKEE

Men Shown (Left to Right)
Front Row – James D. Miller, David Bradley Mfg. Works, Bradley, Illinois, Chapter Treasurer. Harold C. Mason, S.C. Johnson, Inc., Racine, Wisconsin, National President. Richard C. Kocher, Caterpillar Tractor Co., Joliet, Illinois, Chapter Secretary. M. Rex Easterling, Caterpillar Tractor Co., Joliet, Illinois, Chapter President. Walter A. Verbeck, International Harvester Company, Chicago, Illinois, National Chapter Formation Committee.

Back Row – Thomas G. Wright, American Steel & Wire, Joliet, Illinois, Chapter Councilman. Wesley T. Head, Ordnance Ammunition Command, Joliet, Illinois, Chapter Councilman. Donald E. Bacon, R.R. Donelly & Sons, Chicago, Illinois, National Vice President. Robert M. Timmerman, A.O. Smith, Corp., Kankakee, Illinois, Chapter Vice President. Charles L. Henderson, Olivet Nazarene College, Bourbonnais, Illinois, Chapter Councilman.

FOX RIVER VALLEY

From left to right – Council member - Douglas Sullivan, Elgin National Watch Company. Treasurer – Frank Stolfa, Illinois Tool Works Shakeproof Division. 1st Vice-President – Arnold Bailleu, St. Charles Manufacturing Company. National President – Hal Mason, S. C. Johnson & Son Company. President – Walter Verbeck, International Harvester. 2nd Vice-President – George Morton, Automatic Electric Company. Secretary – Frank Besore, R. R. Donnelley & Sons Company. Council Member – William Berg, Combustion Engineering.
Not present – Council member – John English, Jefferson Electric Company.

KALAMAZOO

Lew Landreth, Left – Charles Terwilliger, Right

The NIAGARA FRONTIER Chapter members took advantage of the hospitality of Westinghouse Corporation and enjoyed a plant visitation, plus an explanation of the Westinghouse method of creating and handling budget reports. The tour was under the guidance of the Budget Manager LES BERGER and he was assisted by DAN THOMPSON, JACK LLOYD and SAM McCLURD.

CINCINNATI Chapter members MORLEY THOMPSON, CHARLES KENDALL, RICHARD SHAW, MEL AICHHOLZ and LARRY HAVERKAMP will serve as discussion chairmen at a seminar presented by the Cincinnati Chapter NAA.

The CANTON and CLEVELAND Chapters held a joint meeting of the society on April 8th at the Onesto Hotel in Canton, Ohio. We hope someone had a camera at this affair as we would like to report to the membership on affairs such as these.

The ST. LOUIS Chapter reports that due to the increased interest in budgeting the St. Louis University has found it necessary to split its class on Budgetary Control. REID McCRUM and FRANK McARTHUR of the St. Louis Chapter will be the instructors.

IN MEMORIAM

NELSON DRAKE, a charter member of the Los Angeles Chapter. Nelson was very active in the affairs of the chapter and recently contributed an article to Business Budgeting. His passing brings a great deal of sorrow to those who knew him well.

CLIFFORD MARKS, a member of the Chicago Chapter. Cliff was a regular attendee at the Chicago meetings and contributed much to the success of the Chicago Chapter.

JOHN W. DUNNING – Controller, The Climalene Co., N. Canton, Ohio

C. D. DORWAY – Project & Budget Supervisor, International Harvester Co., Hinsdale, Illinois

ROSCOE G. SAPPENFIELD – Vice Pres. & Treas., Campana Sales Co., Batavia, Illinois

BEN W. MATTEK – Budget Director, DeKalb Agricultural Assn., Inc., DeKalb, Illinois

WILLIAM H. AWALT – Chief Accountant, Ideal Industries, Inc., Sycamore, Illinois

JOSEPH D. PARRISH – Budget Analyst, Caterpillar Tractor Co., Joliet, Illinois

ROBERT F. PARKER – Accountant-Controllers Staff, McCord Corp., Detroit, Michigan

ROBERT L. EADY – Director of Budgets, American-Standard, Detroit, Michigan

JAMES C. WELCH – Budget Supervisor, Bulldog Electric Products, Div. of ITE, Detroit, Michigan

W. A. WASHKOWIAK – Budget Supervisor, Johnson & Johnson, Oak Lawn, Illinois

JOHN M. GALVIN – Budget and Accounting Supervisor, Froedtert Malt Corp., Div. Basic Products Corp., Milwaukee, Wisconsin

EDWIN E. HYATT – Director of Objective Planning, The Borden Co. – Southern Div., Houston, Texas

CHARLES LAZAR – Secy-Treas., Indiana Forge & Machine Co., East Chicago, Indiana

GEORGE A. BROBERG – General Accountant, Edward Valve, Div. Rockwell Mfg. Co., East Chicago, Indiana.

NORBERT J. GEHLSEN – Divisional Controller, Merchants Motor Freight, Inc., St. Paul, Minn.

LAIRD D. WALDO – Asst. to President, Hubbard Milling Co., Mankato, Minnesota

JOSEPH T. AYRES, JR. – Chief Cost Accountant, Olin Mathieson Chemical Corp., St. Ann, Missouri

LEON SAILOR – Budget Accountant, I–T–E Circuit Breaker Co., Philadelphia, Penn.

F. ANDREW BEST – Deputy Comptroller, Air Defense Command, Colorado Springs, Colo.

JAMES E. CAULO – Budget Director, F & M Schaefer Brewing Co., Hillsdale, New Jersey

WILLIAM MASHA – Budget Supervisor, U. S. Plywood Corp., Bronx, New York

ROBERT W. PENSMITH – Accountant, Standard Oil Co. (N. J.) New York, New York.

JOHN F. FENNELL – General Accountant, Champlain Co., Inc., Roseland, New Jersey

JAMES R. FORD – Accounting Supervisor, The Mennen Co., Morristown, New Jersey

EDWARD J. NOHA – Planning Mgr., Allstate Insurance Co., Murray Hill, N. J.

ROBERT C. PERKINS, Sr. – Accountant-Admin. Services Dept., Arthur Andersen & Co., Dearborn, Mich.

PARRY KELLER, Jr. – Staff Asst. for Planning & Capital Budgets, The East Ohio Gas Co., Cleveland Ohio

WALTER FERGUSON – Needham, Massachusetts

NORMAN MADSEN – Retail Credit Co., Atlanta, Georgia

DONALD W. CARLSON – Chief Accountant-Div., General Mills, Inc. Chemical Div., Kankakee, Ill.

EMMETT GRAY – Administrative Controls, A. O. Smith Corp., Kankakee, Ill.

THOMAS H. HAYDEN, Jr. – Controller, Puritan Cordage Mills, Louisville, Kentucky

HOWARD T. WILLIAMS – Budget Accountant, Chemetron Corp., Girdler Process Equip. Div., Louisville, Kentucky

RAYMOND J. KLINC – Asst. to the Controller, The Weather Proof Co., Mt. Olive, Illinois

WM. J. LUKING – Manager Budgets, Pet Milk Co., St. Louis, Mo.

BERNARD C. TAYLOR – Asst. Vice-Pres., Bank of America, N T and S A, San Francisco, California

D. B. TWEEDY – Budget Director, American President Lines, San Francisco, California

BETTY MAE KAROS – Analyst, Trans World Airlines, Kansas City, Missouri

HERBERT L. FRIESZ – Controller, Midland Mfg. Co., Inc., Kansas City, Missouri

JOHN A. SKINNER – Analyst, Trans World Airlines, Inc., Kansas City, Missouri

FRANK T. WHIFFEN – C. P. A., self-employed, Orpheum Theatre Bldg., San Diego, California

DAVID T. RAKER – Industrial Accountant, The Reardon Company, St. Louis, Missouri

RUSSELL M. ASHTON – Administrative Asst., Ford Motor Co., Wheatridge, Colorado

JAMES E. SHELTON, Jr. – Corporate Budget Analyst, Beckman Instruments, Inc., Fullerton, Calif.

EDWARD BRUCE ROGERS – Mgr. of Budgets Dept., Automobile Club of Southern California, Los Angeles, California

WILBERT E. LARSON – Asst. Plant Controller, Armour Pharmaceutical Company, Kankakee, Illinois

DONALD K. MAHAN – Budget Supervisor, Chrysler Corp. – Amplex Div., East Detroit, Michigan

ROBERT McCONNELL – Administrative Assistant, Diebold Inc., Canton, Ohio

RALPH B. HORNE – Supervisor of Budgets, Allis-Chalmers Mfg. Co., Pittsburgh, Penn.

FRED J. SANFORD – Cost and Budget Analyst, American Viscose Corp., Meadville, Penn.

FRED B. MORGAN – Cost and Budget Analyst, Roanoke, Virginia.

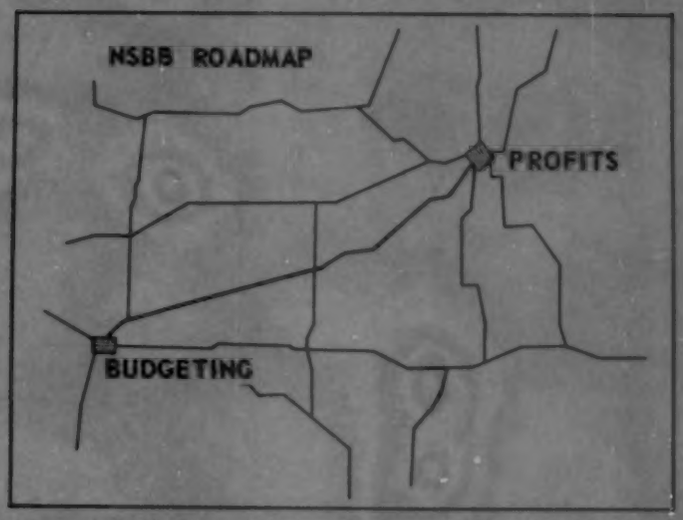
LAWRENCE B. JACK – Director of Budgeting and Control, British Columbia Elec. Co., Ltd. Vancouver, B. C., Canada

THOMAS RICHARD LAIR – Planning Manager, Allstate Insurance Co., Menlo Park, California

WILLIAM M. HARVIE – Staff Asst. to Comptroller, American Smelting & Refining Co., New York, New York.

ROBERT A. WORSNOP – Staff Financial Analyst, Ford Motor Co., Dearborn, Michigan

GILBERT R. WALKER – Budget Analyst, Danly Machine Specialties, Inc., Chicago, Illinois



Thursday, May 21, 1959 at Minneapolis the theme of the day will be "Budgeting – The Road Map to Profits". Developing the theme will be the speakers on the program of the 1959 NSBB National Convention. A. L. Nordstrom, Program Chairman has gathered together an outstanding group of recognized experts in their fields, men who have a wealth of practical experience to back up their words with deeds of accomplishment. You can't afford not to take this road, and the men who know the route best will be at Minneapolis on May 21 and 22 to show you the way without costly detours.

1959 NSBB NATIONAL CONVENTION PROGRAM

THURSDAY: May 21 – Theme: "Budgeting-- The Road Map To Profits"

9:30 A.M.	"Profit Planning"	J. R. Duncan, President Minneapolis Moline Co.
10:15 A.M.	"Financial Planning In the Jet Age"	Donald Nyrop, President Northwest Airlines, Inc.
11:00 A.M.	Annual Membership Meeting	
12:15 P.M.	Luncheon Speaker	Maurice Stans, Director of Federal Budget
1:45 P.M.	"Economics and Budgeting"	Berle Sprinkle, Economist, Harris Trust & Savings Bank, Chicago, Illinois
2:30 P.M.	"A Practical Approach To Capital Budgeting"	Charles Holsteen, Sup't. of Cost Control, United Airlines
3:30 P.M.	"Long Range Planning"	George Wachholz, Controller, Minn. Mining & Mfg. Co.

FRIDAY: May 22 – Theme: "Pinpointing the Profit Dollar"

9:15 – 12:00 A.M.	Three Seminar Sessions	
	"Building A Budget Program"	Chairman - Chas. Eckelkamp, New York Chapter
	"Balance Sheet Budgeting and Cash Forecasting"	Chairman - Wm. McGuire, Milwaukee Chapter
	"Budgeting the P. & L. Statement"	Chairman - Judd Snell, Twin Cities Chapter
12:30 P.M.	Luncheon Speaker – "Listening Is Good Business"	Dr. Ralph G. Nichols, University of Minn.
1:45 P.M.	"Pinpointing the Profit Dollar as Applied to Distribution and Merchandising"	- - - - - - - - (Speaker yet to be obtained)
2:30 P.M.	"Pinpointing the Advertising Dollar"	Clifford S. Samuelson, Assistant Director of Advertising, General Mills, Inc.